

Exothermic Weld System a way to get strong joint

Exothermic welding system is a process of jointing two materials without loses in its characteristics. With some simple steps we get the joint free material that is molecularly bonded with material welded. These joints are permanent and can't be separate out after joint. These joints can bear high mechanical stress above then the conductor.



Features inhibited

- 100% contact surface area
- Improve electrical and mechanical property of joint
- Available for various material
- A single mould can be useful for 70 to 100 joints
- meets UL 467, NFC 15-100, NEC article 250, BS 6651, IEEE 80, 837, 1100 standard



Steps to get perfect joint

- Clean mould by brush and wear protective gloves
- Place conductor in mould and hold tightly by handle clips
- Place metal disk and pour ignition powder
- Ignite it and stay away from the process for 2 minutes
- Easily open the mould and extract the joint
- Clean mould
- Remove excess amount of material
- Joint is ready to use



Material suited for :

Materials that can easily be used while processing exothermic weld system are Copper, Copper clad steel, galvanized iron, stainless steel, Steel rail, wrought iron, cast iron and many more. Weld power can be used to same conductor or for different conductor material.



Advantages

- Reliable joint and stable at high temperature
- Joint have high Current carrying capacity
- Easy to handle
- Ageing free
- No effect of environments i.e. non-corrosive
- Highly portable



Comparison to other joint

Exothermic welding is best and highly recommended in Lightning protection and Grounding system. <u>Exothermic welding system</u> offers 100% contact surface area whereas as Bolting/Crimping and Brazing offers 10-15% and 15-25% contact surface area respectively. Joint after the process we get is totally ageing free and non corrosive in nature.

In The End

It is a process to get the strong joints with some simple steps. After simple process Joint we get is molecularly bonded which is difficult to separate out of conductor. It is done where the clamp and coupling may have a chance to fail.